

**ALASKA DEPARTMENT OF FISH AND GAME  
CODED WIRE TAG SAMPLING PROGRAM**

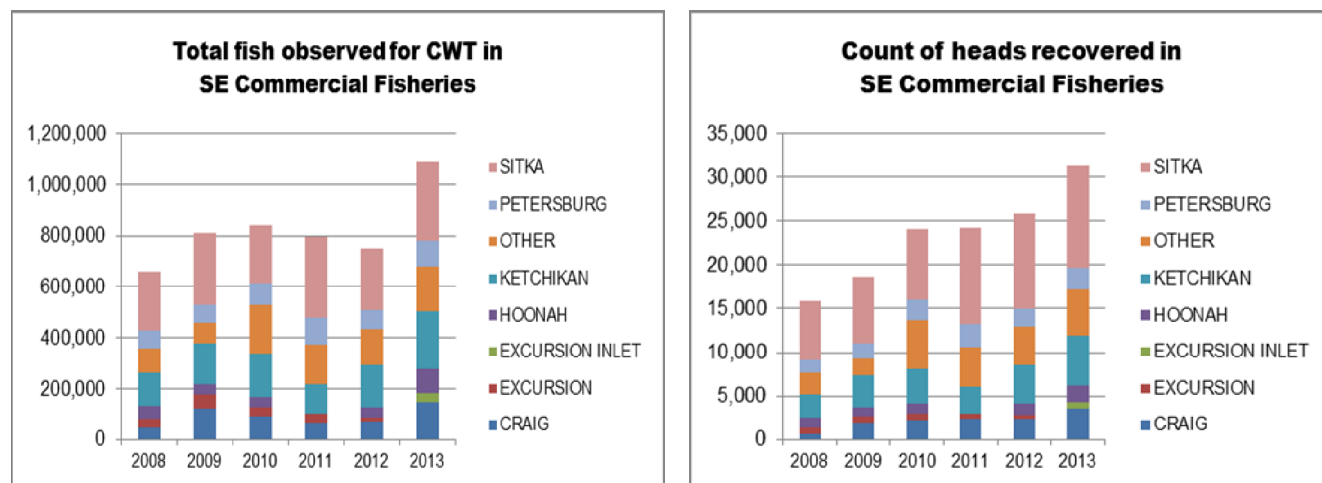
**SAMPLING INSTRUCTIONS  
USING ELECTRONIC DATA COLLECTION  
COMMERCIAL FISHERIES**

**2014  
SOUTHEAST ALASKA**

**Introduction**

Coded wire tags (CWTs) recovered from properly designed and conducted studies can provide scientists, fishery managers, and hatchery operators with data for evaluating and managing all salmon stocks. CWT recovery data are used inseason to estimate the contribution of Alaskan hatchery stocks to Southeast fisheries.

The graphs below represent numbers of fish observed for CWT and the number of heads recovered for the past 6 years.



The reliability of this technique as a useful tool depends on the adequacy of each study's design as well as successful implementation of the study's design criteria. Many variables can affect the success of a study between the time it is designed, when fish are marked and released, when adults are recovered, and when data are reported and evaluated. If the objectives of a study are to be achieved, the following design criteria must be met.

1. The number of fish marked with CWTs and released will be large enough to produce a population of adults from which an adequate sample can be taken.
2. The planned sampling rate will be achieved over time and area, producing a statistically adequate sample so that inferences about the population in general can be made with a certain degree of precision.

3. Data from the sampling program will be reported accurately within a time frame that meets a project's objectives.

### CWT Sampling Objectives

Southeast Alaska's CWT Sampling Project is part of a coastwide program to recover CWTs from commercially caught salmon. An agreement among Pacific Coast States and Canada assures scientists and managers that at least 20% of commercially caught Chinook and coho salmon will be sampled for the presence of CWTs.

The sampler's role of randomly sampling the fisheries for Chinook and coho salmon bearing CWTs (externally identified by a missing adipose fin) is extremely important. The sampler is a vital link in acquiring information for use by fishery managers. This information will ultimately impact the fishermen you are interviewing. The success of any tag study depends on your conscientious efforts directed at sampling troll and net fisheries and reporting the data you collect completely and accurately.

### Hatchery Contributions and Implications to US/Canada Chinook Quota

Heads from all commercial sampling sources are usually processed in the same week that they are received at the Tag Lab. The number of salmon sampled is updated in the database when sampling information is offloaded from handheld electronic data terminals, or manually entered from paper forms. Codes are entered directly into the database as tags are read. Catch estimates, sampling statistics, and tag code data are merged daily with release data to generate inseason hatchery contribution estimates. This is generally achieved within several days of catch and sampling. In SE, CWT data are used to assist managers with their inseason management decisions.

Expansion factors, calculated for each unique stratum (species/gear/time-period/area), are reported for each individual random recovery. Dependent on project objectives and sampling design, this basic stratification scheme may be modified. Expansion Factor is defined as:

$$\text{Expansion Factor} = \frac{\# \text{ fish caught}}{\# \text{ fish sampled}} \times \text{Adjustment Factor for Lost Heads} \times \text{Adjustment Factor for Lost Tags}$$

Contribution estimates for each individual tag recovered in a stratum are also calculated. Contribution is defined as:

$$\text{Contribution} = \text{Expansion Factor} \times \text{Tag Ratio (\# released / \# tagged per code)}$$

Contribution estimates for each recovery are summarized, aggregated, and reported in many standard reports and are available through online data retrieval. Alaskan hatchery contribution of Chinook salmon to commercial and sport fisheries is used as the basis for implementing the "add-on" provision of the US/Canada Pacific Salmon Treaty. The hatchery add-on is calculated by subtracting pre-treaty hatchery harvest (5,000 Chinook) and a risk adjustment factor (for potential overestimate of the total hatchery contribution due to sampling variability) from the total Alaskan hatchery contribution to Southeast Alaska's commercial and recreational fisheries. The resultant value is the number of Chinook that can be added to the all gear negotiated base catch ceiling. The hatchery add-on for Chinook salmon has ranged from 18,700 to 62,700, since 1990. Alaska is able to take inseason advantage of the add-on provision of the Treaty because we are able to process samples and tags within a few days of being caught.

## General Instructions

1. The supervisor in charge of your survey site will make specific work assignments, scheduling, changes in procedures, etc. Any questions, suggestions, problems, or requests for assistance should be directed to that person. Any changes in assignments or scheduling will only be made through one of these people. Supervisors and survey site assignments are (all telephone numbers have a 907 area code):

<u>Supervisor</u>	<u>Location</u>	<u>Telephone</u>	<u>Survey Sites of Supervision</u>
Anne Reynolds Supervisor	Juneau	465-2444	Regional Port Sampling
Anne Reynolds	Juneau	465-2444	Juneau, Hoonah, Yakutat, Excursion
Anna Buettner	Ketchikan	225-9677	Ketchikan, Craig
Rhea Ehresmann	Sitka	747-1150	Pelican, Port Alexander, Sitka
Jeff Moran	Metlakatla	886-3474	Metlakatla
Jeff Rice	Petersburg	772-5227	Petersburg, Wrangell

2. To ensure the continued cooperation of cold storage or cannery operators, professional work habits must be exhibited at all times by sampling personnel. You represent the Department of Fish and Game and should conduct yourself in a professional manner.
3. Questions or complaints regarding department policy or regulation should be directed to a department management biologist. Questions about the CWT sampling program should be referred to your supervisor or Detlef Buettner in Juneau (465-3496). Never discuss your personal opinions about department policy or management decisions with fishermen.
4. Refer any problems that may arise with processors, management, or fishermen to your supervisor.
5. Catch information, including numbers of fish caught, name of place fished, and day caught is confidential information. **Do Not Discuss** an individual fisher's catch information with other individuals. The number of fish processed by a processor and the number of fish bought by a tender is also confidential. The success of the program as a whole depends on the degree of cooperation you receive from the fishermen you interview. A sure way to lose your credibility and jeopardize our good working relationships with fishermen and processors is to discuss the confidential information you collect.

## General Sampling Instructions

1. Become acquainted with cold storage personnel, the manager, the foreman, and the fish grader. Explain what you are looking for and when you will be around their facility. Be sure to explain the program to new processors and remind them to set aside heads with our cinch straps, ATA cinch straps, and/or flagging attached. Your success will depend on the cooperative working relationship you create with processors.
2. Where you stand to observe, measure fish, and talk to fishermen will depend on the facility's setup. Be as unobtrusive as possible. Your activities should not disrupt normal processor operations.
3. There are two primary types of samples: random and select.

**RANDOM** samples: for our purposes, random samples are taken from landings that have an equal opportunity to be inspected for the presence and/or absence of adipose clipped fish. Tags recovered from this type of sample provide us with the most valuable data. Data recovered from the portion of the catch that has been sampled are used to make inferences about that part of the catch population that has not been sampled. Tags recovered from random sampling programs are used to estimate the contribution of tagged fish (and those unmarked fish that are represented by a tag code) to sampled fisheries. Fish from mixed districts for net gear should only be sampled if the fish onboard are all from the same quadrant. Information on specific sampling of seine caught Chinook can be found under number 9 on page 6.

Species code 411 should not be recorded for any random troll samples, even if it is a terminal fishery that is allowing Chinook <28 inches to be retained. These fish should be recorded as Chinook, 410 because they are legal and being sold as Chinook, unlike the seine Chinook.

If an actual sublegal Chinook is landed by a troller, it should not be recorded on the random sampling form but a separate select sample should be created and the fish will then be recorded as a 411.

Effective in 2012, Chinook (jacks and legals) for all gillnet areas will be recorded as 410 (not 411) from this point forward.

**SELECT** samples: are those heads or whole fish that are voluntarily given to you by a processor or a fisher, or sampled by you from fish landed but not sold. These heads would not have been recovered in your random sampling activities. These recoveries cannot be used to make inferences about a larger population, but the data they represent may be useful to some managers or researchers. Fish that are not sold and reflected on a fish ticket should be recorded as select and not included in a random sample. **At no time should random sampling duties be abandoned to collect and handle select recoveries.**

4. **Determine if any adipose clipped fish were separated out from the catch you are sampling.** Data from the portion of the catch sampled can be used to make inferences about the unsampled catch only if tags remain randomly distributed throughout the catch. Ask the fisher if they have removed any adipose clipped fish from their catch and delivered them to someone else, e.g., to another Alaska Department of Fish and Game (ADF&G) office. If they have, this vessel should be

excluded from your random sample. If the fisher has separated out the fish missing adipose fins you **must** sample the entire catch (or exclude the entire catch). The same basic rules apply to tenders. **It is especially important that you ask tender operators if any adipose clipped fish were separated from the catch and delivered to another location.**

5. **Do not deviate from established random sampling procedures.** Your supervisor should provide you with guidelines for random selection of vessels or tenders, which must be carefully followed. In particular, if a fisher volunteers their vessel for sampling, perhaps because they have carefully flagged missing adipose Chinook salmon, the sampling of this vessel should be **recorded as a random sample only if that vessel would have been selected for sampling in your normal selection process.** The adipose clipped fish should be recorded as a select sample, if the volunteered vessel would not be randomly selected for sampling.
6. Record data from each vessel sampled on the electronic CWT Sampling Form. If a vessel did not have any marked, landed fish, record "zero" for # AD-CLIPS SEEN and record the number of fish observed for TOTAL # FISH CHECKED FOR AD-CLIPS. "Zero" adipose clips is a valid and meaningful observation.
7. Do not record recoveries from random and select samples on the same sample.
8. Time spent counting fish and looking for missing adipose fins is wasted if you do not record HARVEST TYPE, GEAR TYPE, DATE SOLD, AREA INFORMATION, TOTAL # FISH CHECKED FOR AD-CLIPS, and # AD-CLIPS SEEN.
9. Each head sent to Juneau must be identified by a cinch strap provided by the Tag Lab and must be accompanied by a completed sampling session. This is true for heads recovered from both random and select samples. **Heads not identified by a cinch strap or not listed on a sample will not be processed.**
10. Trollers fishing more than one experimental or terminal area, or in more than one type of fishery, are required to mark or otherwise separate their catch by experimental/terminal area and/or HARVEST TYPE. Only sample mixed HARVEST TYPE or mixed experimental/terminal area deliveries if the catch from each unique fishery has been marked or kept separate as required. **You will need to complete a separate sampling form for each HARVEST TYPE and for each experimental/terminal area.** Processors must also generate a separate fish ticket for each HARVEST TYPE delivered.
11. **You must personally observe a delivery and determine which fish are adipose clipped, in order for a sample to be random.** Many processors are very interested in the sampling program and are extremely helpful. However, your sampling responsibility must never be shared with or delegated to processors. Keep track of the numbers and species type of the fish being sampled by tally counter. Do not use fish ticket numbers as a count for the TOTAL # FISH CHECKED FOR AD-CLIPS. Heads from adipose clipped fish recovered in your absence by processors should be listed on a select sampling session or form.

**12.** Instructions for sampling seine caught Chinook are essentially the same as for sampling any other fish.

- First - ONLY select and sample Chinook, regardless of size, that have been sold and the processor is going to sort, weigh, and process. Do not select and sample fish that will not be purchased and reflected on the fish ticket, e.g. Chinook >21in and <28in legal measurement.
- Second - as you look at Chinook to determine if the adipose fin is missing, keep a separate count of Chinook greater than 28" and Chinook less than 21" total length. These two size classes are essentially treated as two distinct species of fish. These counts and any adipose clips found should be recorded as either code:
- 410 = CHIN  $\geq$  28" (711mm) TOTAL LENGTH or,
  - 411 = JACK  $\leq$  21" (533mm) TOTAL LENGTH

**NOTE: Chinook >21 in and <28 in should not be included in counts during random sampling as these fish can NOT be sold, except under EO usually at terminal fishery sites. They should then be included with your jack counts for that particular area.**

Legal lengths are **total** (tip of snout to tip of tail) lengths. Legal lengths are used to determine whether or not a Chinook salmon is code 410 or 411. Mid-eye to fork lengths are the lengths to be recorded onto the sampling form. Chinook with legal lengths between >21 in and <28 in should not be recorded on the sampling form as they cannot be sold, unless, as mentioned above, the specific fishery has an EO issued allowing the retention and sale of this size category, which should be sampled and recorded as "Jacks". (See Figure 3)

The confusion in how to sample and record seine caught Chinook comes from the regulations governing the harvest and sale of Chinook by the seine fleet that specifies three size classes of Chinook. Remember, your role is as a sampler, not an enforcement officer. The measurement, by regulation, is total length (snout to tip of tail), and the three size classes are:

- Large (>28in or 711mm total length) Chinook which may be retained and sold only during "Retention Periods". During non-retention, the large Chinook should be released at sea by the fishing vessels.
- Medium (>21in or 533mm and <28in or 711mm total length) Chinook which may be retained, but not sold unless, as mentioned above, the specific fishery has an EO issued allowing the retention and sale of this size category, in which case these should be sampled and recorded as (411) Jacks.
- Small (<21in or 533mm total length) Chinook which may be retained and sold as small Chinook. These are recorded as (411) Jack.

Your job is to select and sample only Chinook from fish being purchased, regardless of size. Chinook in the medium category should **NOT** be checked. They cannot be sold and therefore, would have to be recorded onto a separate select form. The only Chinook that should be recorded onto the random forms are the small and large Chinook only during retention periods. If you observe large Chinook being sold and weights recorded on fish tickets during non-retention openings, notify your supervisor.

## General Instructions on Handheld Terminal Use

Beginning in 2006, ADFG, Southeast Region, started collecting salmon port sampling data electronically using handheld data terminals, or mobile computers, and transferring electronic data directly to central databases in Juneau. The CWT data collection program ZanderCWT is the first deployment of these techniques. If you are sampling electronically, always keep a back up supply of CWT sampling forms in the event that a problem should arise with the handheld. If data is lost or the handheld didn't save the data, please contact the CWT Lab as soon as possible. This will give the lab a chance to save the heads for species identification.

The standard handheld is the Intermec model CN3 (Figure A) with a numeric keypad:

### CN3 User Guide



Figure A.

### To Operate Handheld:

Turn the device on by pressing the yellow On/Off key.

Press the On/Off key again to turn the device off.

To start the program, tap **START** in upper left corner of screen, and select **CWTmobile** (looks like a magnified fish) from the **START** menu.

Four data entry screens will appear as “tabs” across the bottom of the window:

**SAMPLE, CATCH, HEADS, SPP COUNTS and FPD.**

(Sample tab and date selector screens illustrated below).

Each screen has several text box data fields. A text box with an inverted triangle (▼) denotes a drop down list.

Tap the triangle to open a list.

Tap on an appropriate item from the list to enter that data.

If the list is longer than the screen, tap and hold the slider on the right.

If the screen goes dark to conserve power, turn the light back on by pressing a Blue scanner button on either side of the handheld.. Alternatively, to turn on backlight, press and hold the orange plane button in the lower left for two seconds, then press and release the “3” key while still holding the orange button.

## Specific Instructions for Random Samples

1. Sampling must be performed in the following two step manner, in order to ensure that a reliable estimate of the number of marked and unmarked fish is attained:

First - select the fish you are going to sample, count it

Second - determine if the adipose fin is absent

If the fish you selected to sample is laying so you can’t get a good look at the adipose fin area, you must turn the fish and/or use your hand to feel for the fin. Count those fish that you have selected to sample. Once fish are selected you must then determine if the selected fish have or do not have adipose fins. Remember you are selecting fish to sample, counting them and then looking for the presence or absence of adipose fins. You are not simply looking for adipose fins.



2. A sampling session must be completed for each vessel sampled. A sampling session must be **completed even if no marked fish were observed in a sampled landing**. "Zero" for TOTAL CLIPS is a valid and meaningful observation.

**Note:** In the spring troll fisheries, fishermen may fish in more than one experimental and/or terminal area during fishery openings. Fishermen are required to mark or otherwise separate their catches if moving between experimental areas, or if participating in more than one HARVEST TYPE (fishery) before selling fish. If a fisher has separated their catch (all fish caught, not just adipose clipped fish) by area or HARVEST TYPE as required, you can sample that vessel, but you must complete a separate sample session for each distinct HARVEST TYPE or experimental/terminal area. Processors are required to complete a separate fish ticket for each harvest type and area fished. If you are unsure about the type of fishery you are sampling, ask your supervisor.

3. Record the following fishery data items in the **SAMPLE** and **CATCH** tabs before you begin to sample a vessel's catch. Most items should not require interviewing the fisher, but some are required before you can sample heads, exit the session, or start a new sample.

**Note:** Remarks are an important tool in CWT sampling to explain unusual situations at various points of the sampling process, and to accurately identify name of place(s) fished. Remarks go in the **REMARKS** field of the **SPP COUNTS** tab, but can be entered at any time on other tabs by selecting from the menu. Detailed instructions for entering REMARKS are found below in the discussion of the **SPP COUNTS** tab.

## **SAMPLE TAB**

- **SURVEY SITE (REQUIRED):** Select the name of the survey site or community where the processor you are sampling is located.
- **SAMPLING TYPE (REQUIRED):** Select either RANDOM or SELECT from the drop down list. Refer to General Sampling Instructions for distinction between these two sample types. Random and select recoveries cannot be entered during the same sampling session.
- **SAMPLER:** Select your last name from the drop down list. If your name is not in the list of valid samplers, close the drop down by tapping inside the data field, and manually enter your last name using the onscreen keyboard. Tap the Keyboard icon in lower right of screen to activate it. Close the keyboard by tapping the keyboard icon again. To clear an incorrect entry, tap the field and select the correct name from the list, or tap and drag across the sampler name, and press the Bksp key on the keypad to clear the field.
- **DATE SAMPLED:** Auto-filled at program start.

**Note:** If you start the sampling program, but do not actually start sampling until a later day, you **MUST** change this auto-filled date to the true current date before you can save sampled head numbers.

If either time or date are incorrect, correct these by tapping Start->Settings, select the System tab, and select **Clock**. Drag the clock hands to the correct time. Select individual date elements and either enter the correct digits from the keypad, or use the up and down arrow keys (white keys with black arrows) to change.

- **AREA(S) FISHED (REQUIRED at final save)** At a convenient time, ask the skipper/fisher for information regarding the name of place fished and record it. This field may be left blank until

later if need be, but remember, the sample is nearly useless without area information, and you will not be able to start a new sample without something in this field. **It is important that the district the fisher lists on the fish ticket is one of the districts listed here.** If you cannot determine the district and subdistrict, but the fisher can tell you the name of the place fished, enter this in the REMARKS box on **SPP COUNT** tab. Enter 001 for District and 00 for subdistrict as place holders until you can find the correct district and subdistrict. Make every effort to check the fish ticket so that you can enter the correct information.

Tap in the data text box to open the **DISTRICT and SUBDISTRICT** data entry screen. Select the first district fished from the drop down list, and select the first subdistrict fished. Select "00" for subdistrict if the actual subdistrict is not known. Refer to the LIST OF COMMON "PLACES FISHED" in the sampling manual or to area maps. Tap the ADD button. This will add the district/subdistrict combination to a list of areas fished, and exit back to the **SAMPLE** screen where the district and subdistrict are now displayed in the field.

If the fisher fished in multiple districts/subdistricts, tap the **AREA(s) FISHED** data field again to go back to the **DISTRICT and SUBDISTRICT** screen. Select another district and subdistrict combination from the drop down lists, and tap the ADD button. This adds the new combination, takes you back to the **SAMPLE** screen, and displays the word <Multiple> in the data field. Repeat the process to add more district/subdistrict combinations.

If the fisher has separated the catch (not just the adipose clipped fish) by distinct areas and/or fisheries, and fish are recorded on separate fish tickets (required during terminal and experimental troll fisheries), **complete a separate sampling session for each**, or use a paper sampling form for the second area fished since you cannot work on two separate sessions at the same time.

**When sampling tenders, record the DISTRICT(s) and SUBDISTRICT(s) where fish were caught, NOT the location where the tender was anchored.**

- **WATER TYPE:** Saltwater is automatically selected and this field has been disabled.
- **STREAM CODE (only valid for WATER TYPE=Freshwater):** This field has been disabled.

## **CATCH TAB**

## **Numbers Entry Screen**

- **VESSEL ADFG #:** Tap the field and enter the ADFG vessel registration number which can be obtained from the side of the vessel, the fisher's gear card, or a stamped fish ticket.

We will send letters at the end of the season reporting catch and release information for each clipped salmon sampled from an individual fisher's catch. These letters provide feedback to fishermen and generate good PR. Our only means of identifying the fisher and their address is through ADFG #. If you sample individual deliveries being sold to a tender, and can obtain ADFG # for each fisher, a letter will be sent to each individual. Whenever possible, complete a separate sampling session for each fisher.

- **VESSEL NAME:** After entering the vessel's ADFG#, tap the LOOKUP button to retrieve vessel name from a table of all vessel numbers and names. If the name cannot be found, a message to that effect will pop up. Close the message box and verify that the ADFG# entered is correctly entered. CFEC vessel name and number tables frequently change, so unknown vessels do occasionally occur.

If the number is correct according to the number on the side of the vessel, leave the name displayed as "unknown" and proceed. If known, enter the name of the vessel or owner's name in REMARKS.

If the number is incorrect, tap to the left of the text box on the field name to clear it. Tap in the text box to bring the numerical keypad back up, correct the entry, and try the LOOKUP again.

If only the vessel name is known, and you can't determine the ADFG#, enter the name of the vessel in REMARKS. The name and ADFG# can also be obtained from the fish ticket.

In the case of an unnamed skiff, enter the owner's name, if known, in REMARKS.

If more than one vessel's fish are mixed together, leave the vessel ADFG# blank, and list individual vessel names in REMARKS.

- **TENDER:** If the vessel is tendering, and this box was not automatically checked during the vessel name lookup, tap the box to check it. If the vessel is not tendering, but the box is checked from the name lookup, uncheck this box.

- **MULTIPLE TENDERS:** If more than one tender delivery is combined, check here and also check the tender box. Record all tender names in REMARKS.
- **PROCESSOR:** Select the name of the processor that purchased the fish from the drop down list. If the original processor contracted the processing out to another processor, the original purchaser should be selected from the list. If the processor does not occur on the list, enter the name in REMARKS, and contact your supervisor or data coordinator to request that the Tag Lab add them to the list.
- **DATE FIRST CAUGHT:** If known, this is the first day (or only day) fish were caught. If not known, this is the first day of the opening for this fishery. For tender deliveries, this is usually the first day of the opening for this fishery. However, some tenders pick up fish the first day, return to town, unload the catch, and then return to the fishing grounds to pick up the catch from the closure. This is especially true for gillnet and seine fisheries. This can only be determined by asking the tender skipper or the fish ticket personnel at the individual processors. If fish were caught in multiple fisheries, or in the same fishery but caught during multiple openings, then the date should be the first day of the earliest opening.
- **DATE LAST CAUGHT:** If known, this is the last day (or only day) fish were caught. If not known, this is the last day of the opening for this fishery. For tender deliveries, this is the last day of the opening for this fishery. If fish were caught in multiple fisheries, or in the same fishery but caught during multiple openings, then the date should be the last day of the most recent opening.
- **DATE SOLD (LANDED)** (*REQUIRED if SAMPLE TYPE=Random*): This date should be the same as the "date landed" on the fish ticket for this delivery. Exception: when sampling a tender delivery, DATE SOLD should be the last date that the tender bought fish. (Some tender operators switch the date on their fish ticket stamping machines at midnight while still unloading fish from vessels that fished the previous day. Samplers should try to determine whether the fish were purchased beyond midnight so that the date sold is accurately recorded).
- **GEAR TYPE(s):** Tap the field and select type of gear used to catch the fish. If more than one gear type is represented, tap the field again, select an additional gear type, and <Multiple> will display in the field. Selecting a gear type previously selected from the table will deselect that gear.
- **HARVEST TYPE(s)** (*REQUIRED at final save*): Tap the field and select the harvest type from the drop down list. Refer to Figure 2 for definitions of HARVEST TYPE. It is important that you know the HARVEST TYPE of the catch you are sampling. Ask your supervisor if you are unsure. The HARVEST TYPE recorded here must be the same as that recorded on the fish ticket. Samplers will be told by their supervisor what HARVEST TYPE to use for specific fisheries sampled. **Remember when a fisher separates catch by HARVEST TYPE and/or experimental/terminal area, complete a separate sampling session for each.**

## **General Head Sampling Instructions**

1. **You must first choose a fish to inspect, then look to see if the adipose fin is absent.** If the fish you selected to sample is laying so you can't get a good look at the adipose fin area, you must turn the fish and/or use your hand to feel for the fin. Count those fish that you have selected to sample.

Once fish are selected you must then determine if the selected fish have or do not have adipose fins. Remember you are selecting fish to sample, counting them and then looking for the presence or absence of adipose fins. You are not simply looking for adipose fins. When you observe a marked fish, pull it aside and set it in a spot the grader and you have agreed upon. Fish with partially regenerated adipose fins or poor quality marks should be set aside and treated as if coded wire tagged.

2. **Count as ‘sampled’, each fish you choose to inspect.** Include in that count both unclipped and adipose clipped fish. Count only those fish you are sure either have or do not have an adipose fin. If you did not get a good look at the fin do not count that fish. If you are interrupted, record only those fish you have actually inspected, even though this will be less than the total number of fish in the delivery. Ask the grader for assistance if you are unsure of the species identification. Only those fish that are sold and reflected on a fish ticket should be included in a random sample. Fish that are retained by fishermen for personal use should not be included in the random sample, even if there are adipose clipped fish. These fish should be recorded on a select sample and pertinent comments listed in REMARKS. **Keep track of the numbers and species of fish being sampled by tally counter. Do not use fish ticket numbers as a count for the TOTAL FISH checked for ad clips.**
3. **During a break in unloading, sample the individual clipped fish:**

## HEAD RCVY TAB

**Note: You must enter SURVEY SITE, SAMPLING TYPE, and DATE SOLD (if SAMPLING TYPE=Random) before you can begin sampling heads, because the ADD head button will not work (i.e. will not save data) until you do.** If AREA FISHED (District and Subdistrict) is not known at the time you begin sampling, you can still save during head sampling, but you must enter this information before you can begin a new sampling session. If you have not yet done so, you will be reminded to enter Place Fished in remarks when the first head is added, as well as during each SAVE operation until it is entered.

CWT Mobile
↔ 🔊 ok

**Sample# TST03001 - ADFG# 45687**

Head #:

3

Species:

Flesh:

Clip:

Signaled:

Length:

ATA Num:

(Mid-eye to fork)

Head	Spes	Fls	Clp	Sig	Len	ATA#
▶ 123456	CHUM		1	Y	455	

Add

Edit

Cancel

Delete

Sample

Catch

Heads

Spp Count

FPD

File Settings Database Info
⬆

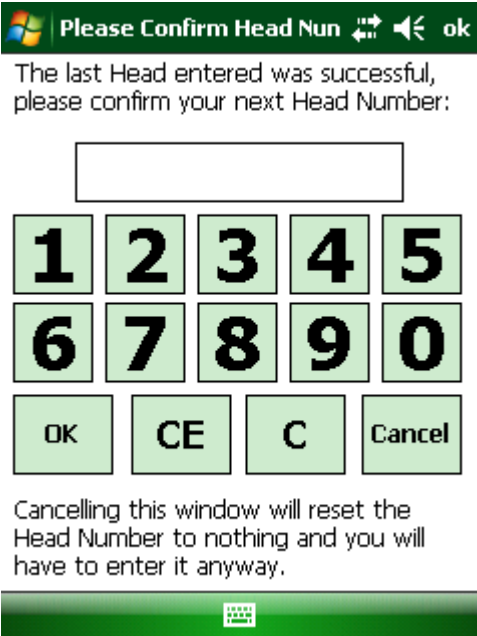
- **HEAD NUMBER:** Your supervisor will assign you a series of pre-numbered cinch straps, and these should be used in numerical order for each adipose clipped fish.

**New for 2014:** Because of the increasing use of mass marking, larger numbers of Chinook and coho are recovered that are adipose clipped but do not have tags. If you are involved in pre-wanding heads and find heads that do not signal with the wand, cinch straps do not need to be attached. Please see detailed instruction on 'No Signal Heads' on page 21.

If this is the first head of a new sampling session, enter the cinch number in the **HEAD NUMBER** field. If cinches are not bar coded, enter the number manually by tapping the field to bring up the onscreen numeric keypad. If the cinches are bar coded, you can either enter the number manually, or scan the bar code by pressing a blue scan trigger button on either side of the handheld unit. To scan, hold the bar code 5-7 inches from the scanner window on top of the unit, press the scan trigger, tilt the label slightly to reduce reflection, and position the beam across the length of the bar code. It will beep and turn off the beam when a successful read has occurred. The range on the handheld units is fairly narrow, so it may take some practice to get the feel for the unit.

If the first bar code cinch is scanned and not manually entered, visually verify that the scanned number is correct. If it is not, the following sequence of numbers that are automatically incremented by one when the ADD button is tapped will be wrong. A reminder to verify the head number will pop up onscreen every fifth fish that has a cinch strap associated with it. When changing to a new sequence of cinch straps, make sure that the new **HEAD NUMBER** is entered correctly.

Every five heads the handheld will ask you to verify the next cinch number. This step ensures that your heads are in synch with the cinches you are using.



The screenshot shows a handheld device screen with a green header bar containing a Windows logo, the text "Please Confirm Head Nun", a small icon, and "ok". Below the header, the text reads: "The last Head entered was successful, please confirm your next Head Number:". A numeric keypad is displayed with buttons for digits 1-9 and 0, as well as "OK", "CE", "C", and "Cancel". Below the keypad, a message states: "Cancelling this window will reset the Head Number to nothing and you will have to enter it anyway." At the bottom of the screen is a green bar with a small icon.

Insert the cinch strap through the mouth and out the operculum (gill plate). Cinch it up snugly to the jaw, but not so firmly that it tears the strap, and position it so that the number can be read when the head is frozen.

If the processor does not allow you to cut off the head of adipose clipped fish yourself, tie a short piece of flagging through the mouth and out the operculum on the side of the head opposite the cinch strap. This will readily identify tagged fish to processors who will remove the head later. **Note: The purpose of the flagging is to help recover CWT heads; if the processor is losing heads you may need to use more or brighter flagging (the Tag Lab will provide flagging if needed).**

If a cinch strap is missing from the sequence assigned to you, list that number in the REMARKS section with the word "Void". This should also be done if you accidentally cinch a fish that has an adipose fin. Remove and discard the cinch. If the head number was recorded on the handheld, delete that head from the sample. Reuse of cinches will result in duplication of the head number and may require data corrections or discards to be made by lab staff.

**If the processor plans to sell fish (including adipose clipped fish) to a whole fish market, you must complete a sampling session anyway.** Assign **HEAD NUMBERS** to all adipose clipped fish and make a note in the **REMARKS** field of the **SPP COUNTS** screen that a head or all heads could not be recovered because the fish were "sold to a whole fish market." Contact the Tag Lab for phantom head number assignments if this continues to occur. Notify your supervisor of this difficulty. Processors are required to give department personal tagged fish heads by regulation.

If an adipose clipped fish is seen but not recovered during the random sampling process, a cinch number must be assigned and recorded in the sampling program. The clipped fish was observed and would have been part of the random sample. Missed or lost heads are important in expansion calculations and need to be identified. Place corresponding cinches in a separate plastic bag labeled "clips seen, but heads not recovered," and submit this with other heads shipped. Indicate that these cinches are enclosed on the outside of the head box.

- **SPECIES:** Select the species of each adipose clipped fish from the drop down list using the following designations:

**CHIN** = king or Chinook salmon including seine caught over 28in\*

**JACK** = Chinook salmon under 21in\*

**SOCK** = sockeye or red salmon

**COHO** = coho or silver salmon

**PINK** = pink or humpback salmon

**CHUM** = chum or dog salmon

**STHD** = troll caught steelhead salmon

**\*Note:** Mid-eye to fork-of-tail (MEF) length is the sampling length recorded in the sampling program in mm. Legal length is based on **Total Length** (tip-of-snout to tip-of-tail) in inches, and is used to determine whether or not a Chinook salmon is species CHIN (legal) or JACK (sublegal). Chinook with legal length between 21in and 28in should NEVER be recorded during sampling unless the specific fishery has an EO issued allowing the retention and sale of this size category. Record these small fish as Chinook (Figure 3).

CWT sampling can occur on loads of all one species, or of mixed species. If sampling only one species, the program can be set to display the same species code from one fish to the next to make data entry easier. However, when sampling mixed species, it is too easy to enter a wrong

species if the displayed code remains the same. To minimize error when sampling mixed species, change this setting to force selection of SPECIES for each head. To change setting, on the **SAMPLE** tab select **Settings** from the menu, and select **Multiple Species Sample** to turn it on (checked) or off (unchecked).

- **LENGTH:** Measure the length of adipose clipped fish on the measuring board provided. Length is measured from middle-of-eye to fork-of-tail (Figure 3) to the nearest 5 mm. Tap in the LENGTH field, and manually enter length using the onscreen keypad. Tap OK to enter, CE to clear the last digit displayed, and C to clear the whole entry. **New for 2014:** Length is not required when the signaled field is 'No' (see detailed instruction on 'No Signal Heads' below)
- **ATA NUM:** If an adipose clipped fish is identified by an Alaska Trollers Association log book program tag, tap the ATA NUMBER field and enter this number from the onscreen keypad. If you select these fish for sampling during random sampling, they are random samples and must still be assigned an ADFG CWT cinch strap.
- **CLIP:** Note the quality of the adipose clip, and select one of the following categories from the drop down list:  
  
GOOD (fish must be observed)  
QUESTIONABLE - partially regenerated or poor quality clip (fish must be observed)  
UNKNOWN - select samples where the fish is not observed by the sampler.
- **FLESH:** Chinook salmon only. If flesh color can be determined easily, select RED or WHITE flesh from the drop down list. If flesh color cannot be determined at this time, record it when the head is retrieved if the data are still on the handheld. If species is not Chinook, this entry is disabled.

Once all fields for a fish are entered, tap the ADD button to add the current fish to the displayed table of sampled heads. Repeat the above entries for each clipped fish in the sample. Remember to tap the ADD button for the last marked fish in the sample.

You can only edit an entry for the last 25 heads sampled. Tap anywhere on the row for the head to edit to open a secondary editing screen. Select the appropriate field, and make the change. Tap the UPDATE button to save the change and exit, or tap CANCEL to exit without saving. To delete a previously sampled fish, tap anywhere in the row to open the editing screen. Tap the CANCEL button to exit the editing screen (this leaves that head row selected in the table), and tap the DELETE button.

4. **Once all adipose clipped fish are sampled, and all species counts are entered, complete the sampling summary information:**



CWT Mobile

New Sample (TST03001)

Species:

Total fish:  Total clips:

☐ All were Sampled

Species	Fish	Clips	TDS?
CHIN	10	0	Y

Add Edit Cancel Delete

Remarks: BREAKWATER-(101-11)  
(≤250 ch.)

Save

Sample Catch Heads Spp Count FPD

File Settings Database Info

- **SPECIES:** Select species from the drop down list.

If the sample type is Random, you must enter at least one species count, or you cannot start a new sample.

You must select and enter a count for all species represented by a head number during the sampling session or you cannot start a new sample. Unfortunately, if no heads were collected, it is not possible to programmatically enforce entry of all species counted. **Zero clips and a count of all fish examined is important information.** It is your responsibility to ensure that counts for all species sampled are entered.

- **TOTAL FISH (Number of fish checked for ad-clips):** This is the count of all fish, by species, that you choose to inspect. Included in that count will be both unclipped and adipose clipped fish. Count only those fish you are sure either have or do not have an adipose fin. If you did not get a good look at the fin, do not count that fish. Do not use fish ticket numbers as a count for the total number of fish checked for adipose clips.
- **TOTAL CLIPS (Number of adipose clipped fish observed):** Count of fish that were missing adipose fins, by species, automatically calculated from the number of heads entered on the **HEADS RCVY** screen. This field will display “0” (zero) if no heads were taken. A sampling session must be completed even if no marked fish were observed in the sampled landing. **Zero for TOTAL CLIPS is a valid and meaningful observation.**

If clips were seen, but heads not taken, manually enter the correct count. You will be required to enter head numbers and corresponding data in the table. Also note head numbers not recovered in REMARKS. The loose cinches should be placed into a plastic bag, put in a box with the heads and a note on the outside of the box should indicate that cinches for heads not recovered enclosed.

- **ALL WERE SAMPLED:** If you examined every fish of a species in the landing, tap the checkbox to indicate Yes. Leave checkbox blank to indicate No. It is vital that you count only

those fish you are sure have or do not have an adipose fin. It is not critical or often possible to sample the entire landing. If you check the box, you are stating that you observed (checked) every single fish of that species landed by that vessel.

When all fields for a species are filled, tap the ADD button to add the data to the table display. Repeat the above steps for each species in the sample. Remember, it is your responsibility to ensure that counts for all species sampled are entered. To delete the information for one species, tap anywhere in the row for that species, and tap DELETE.

- **REMARKS:** Enter the name of the place fished, if known, and record any additional information or comments you may have about the sample or its irregularities in the REMARKS field. For instance, sometimes fish at a processor or dock may be destined for sale at another processor or catcher/seller. If fish are transported or sampled at a site different from the original purchaser, note that site in your remarks. Make a note regarding fish of questionable dispensation (sale destination). FPD trip numbers can also be entered here.

Place Fished is an important tool for resolving questions about locations actually fished for the complex fisheries of SE Alaska, and for matching samples with fish tickets when not all information is known at the time of sampling. Entering Place Fished should be considered a required field. Samplers will be reminded to enter a place fished whenever data are saved until a remark is entered.

You can type remarks directly into this field by tapping in the REMARKS box on the *SPP COUNTS* tab. This will open an onscreen keyboard for keying in the remark. If needed, you can close and reopen the keyboard to make items on the screen visible. Close the keyboard by tapping the little keyboard icon on the lower button bar.

In most cases, it is more convenient to make entries in the REMARKS field by using the REMARKS editor activated from the **File** menu on any tab. Select **Enter Remarks** from the **File** menu. The REMARKS editor consists of two parts—a drop down box for a list of stored

phrases (including places fished), and a REMARKS box that is linked to the contents of the REMARKS field. When the REMARKS editor is activated:

- a) Onscreen keyboard panel is displayed at the bottom of the screen,
- b) Cursor is placed in the empty drop down list field, and
- c) Current contents of the REMARKS field are displayed in the main REMARKS box.

You have several input options:

- d) Pick a stored phrase. Tap the inverted arrow (▼) of the drop down box to open a list of phrases stored in a text file. Select a phrase (note: PF = 'Place Fished') from the list, and tap ADD to add the stored phrase to the REMARKS box (and to the REMARKS field), and tap OK to close the editor. A preceding underscore character is automatically appended to the phrase to denote individual Remarks.
- e) Enter and store a new name or comment phrase. Manually enter the name (prefix place fished with PF:) or comment, using the keyboard input panel and tap the ADD button, and OK to close the editor. This will store it in the stored phrases file, and add it to the REMARKS box, and hence to the REMARKS field.
- f) Enter a new name or comment without storing. Tap in the main REMARKS box (rather than the drop down list box) to position the cursor, and type in the name or comment using the keyboard panel. Tap either ADD or OK to add the name or comment to the REMARKS box and to REMARKS field. It will not be stored in the list of stored phrases.

Note: Stored phrases are saved in a text file (Z:\Zander\Comments) that can be edited with the Notes program on the handheld to add, edit, remove, or sort phrases.

5. **Check to be sure ALL data items are completed on all tabs**, and tap **SAVE** button to store all newly collected data.
6. **If the processor allows you to cut off heads of adipose clipped salmon, do so.** Cut off the entire head, and place each head in an individual plastic bag. (Be certain that the fish have been weighed and the weight recorded by the processors prior to removing ANY heads). Return adipose clipped fish (with head removed) to the processor at an agreed place and time. If the processor does not allow you to cut off the head of adipose clipped salmon, return adipose clipped fish to the grader so that they can be graded and weighed. Remind processors to cut off the entire head of adipose clipped fish and to save the heads for you to collect later.
7. When the current sample is fully completed, tap the **SAMPLE** tab, and tap **NEW** button to save all data and begin a new sample session. Many fields that usually do not change from one sample to the next will already be filled in, so make sure that any changes needed for the current sample are entered correctly.

## Instructions for 'No Signal Heads'

If you are **wanding** heads for the **presence** of a tag and are recording the signal status on the CN3, please follow these steps.

# No Signal Heads

**Remember to Select Wanded  
Sample under Settings**



CWT Mobile

New Sample (TST03001)

Survey Site:

Sampling Type:

Sampler:

Date Sampled: 04/12/2012

Area(s) fished:

Place fished:

Wanded Sampled:

Settings menu options: Synchronize System Time, Multiple Species Sample, **Wanded Sampled**, Default Settings, Sync Setup

File Settings Database Info

**Clip Status is still required  
when Signaled is No**



**Length is not required  
when Signaled is No**

CWT Mobile

Sample# TST03001 - ADFG# 45687

Head #: 123457 3

Species: CHUM Flesh:

Clip:  Signaled: No

Length:  ATA Num:

(Mid-eye to fork)

Head	Spes	Fls	Clp	Sig	Len	ATA#
123456	CHUM		1	Y	455	

Add Edit Cancel Delete

Sample Catch Heads Spc Count FPD

File Settings Database Info

No Signal Heads will be added as an X##### number so cinch straps are not required.



These head numbers will be translated later to a six digit No Tag head number in the CWT database.

**CWT Mobile** ok

**Sample# TST03001 - ADFG# 45687**

Head #:  3

Species:  Flesh:

Clip:  Signaled:

Length:  ATA Num:   
(Mid-eye to fork)

	Head	Spes	Fls	Clp	Sig	Len	ATA#
▶	123456	CHUM		1	Y	455	
	X00001	CHUM		1	N		

**Add Edit Cancel Delete**

Sample Catch Heads Spp Count FPD

**File Settings Database Info**

## Instructions for recording Fisheries Performance Data:

**FPD last tab on menu.**

**Basic data entry just like CWT Sampling**

CWT Mobile FPD Survey 001: 45687 (KARLENE)

Survey Site: JUNEAU  
Date Sold: 04/12/2012  
Gear: ☒ Power troll ☐ Hand troll  
Vssl ADFG#: 45687 KARLENE  
☐ Frozen Fish  
Do not use if CWT sampling  
New FPD Survey Save FPD

Trip Detail Performance

Sample	Catch	Heads	Spp Count	FPD
File Settings Database Info				

**Enter Location and Fish Counts then add to the list.**

**You can edit and delete entries just like CWT heads.**

**Entering Zero Catch entries requires at least one Zero entry for a species.**

CWT Mobile FPD Survey 001: 45687 (KARLENE)

District: 102 Chinook:   
Sub-District: 20 Coho: 6  
Fished Days: 2 Chum:   
Hours: 5 Pink:   

StatArea	Days	Hours	Chin	Coho	Pink
10110	5	2	1	2	0
10215	8	2	0	0	0

  
Add Edit Cancel Delete  
Trip Detail Performance  
Sample Catch Heads Spp Count FPD  
File Settings Database Info

CWT Mobile ok

FPD Survey 001: 45687 (KARLENE)

Survey Site: JUNEAU

Date Sold: 04/12/2012

Gear: ☒ Powertroll ☐ Handtroll

Vssl ADFG#: 45687 KARLENE

☐ Frozen Fish

Do not use if CWT sampling

New FPD Survey Save FPD

Trip Detail Performance

Sample	Catch	Heads	Spp Count	FPD
File Settings Database Info				

**Remember to tab back to  
Trip Detail and Save!**



### Specific Instructions for Reporting Select Samples

Heads voluntarily turned in to you by commercial or sport fishermen or by processors are considered to be select samples. These are recoveries that would not be collected as part of normal random sampling.

Select or voluntary recoveries are always your lowest priority. Never abandon random sampling duties to collect or handle select recoveries. Do not actively solicit collection of these select or voluntary heads from fishermen or processors unless directed otherwise.

**Random and select recoveries cannot be entered in the same sampling session. If you are random sampling a load of chum, sockeye, or coho salmon and the skipper gives you a single adipose clipped Chinook salmon, the Chinook salmon must be listed in a separate sampling session and recorded as a select sample.**

Process select heads similarly to heads recovered in random sampling, but with a few variations as described below. Try to obtain as much information as possible about the fish including name of place fished, length, date caught or sold, gear, harvest type, etc.

1. Complete a sampling session for all select samples.

**Note:** Use a paper form for recoveries from sport fishermen from your backup sampling kit and write in "**Sport**" as HARVEST TYPE. If you can, record a complete mailing address on the sampling form and we will send a letter to sport fishermen with pertinent information for each clipped fish turned in.

2. **SAMPLE TYPE:** Tap Select.

3. Insert a pre-numbered cinch strap through the mouth and out the operculum, using the same series of cinch straps used for random samples. Use in numerical sequence and record the number under **HEAD NUMBER**.
4. **LENGTH:** If possible, measure and record the length to the nearest 5 mm. If the fisher provides you with length information, record it in **REMARKS** and indicate the units and type of measurement.
5. **CLIP:** If the whole fish is not seen, code the clip quality as “Unknown”.
6. If the sample type is Select, the sampling program will not allow access to the **SPP COUNTS** screen. The **TOTAL FISH** checked for clips and **TOTAL CLIPS** seen are not applicable to select samples.

One final caution: Remember that the information you are recording is **confidential**. Do not destroy the cooperative relationship we have with fishermen by discussing an individual's sample or catch information with anyone.

### **SAVING SAMPLE DATA:**

Safely storing data on the handheld is an important aspect of electronic data collection. Some minimum knowledge of when data are safely saved is required to prevent loss of unsaved data, and to avoid frustrations with several mandatory data fields. If you attempt to leave required fields blank, the program will either not permit you to save, or will not allow starting a new sample. It is advisable to save frequently. This will initiate warnings to you when required information is missing on each particular screen. The following four fields are absolutely required, because time spent sampling is wasted without the information:

**SURVEY SITE**

**SAMPLING TYPE**

**AREA FISHED**

**HARVEST TYPE**

If **SAMPLING TYPE** = Random, then **DATE SOLD** is required

If **SAMPLING TYPE** = Random, then at least one entry for **SPP COUNT** is required.

Saving of data for a sample occurs whenever one of the following buttons is tapped:

1. **ADD** on the **HEADS RCVY** screen to save a head, (first head **ONLY**)
2. **ADD** on the **SPP COUNTS** screen to save a count, (not autosaved)
3. **SAVE** on the **SAMPLE** or **SPP COUNTS** screen any time, or
4. **NEW** on the **SAMPLE** screen to start a new sample.

In the unlikely, but not impossible, event that a handheld unit locks up and will not respond, you may need to do a “soft” reset. This will warm boot the unit, and should clear most potential problems, but will result in losing any data from the current sampling session that were not saved through one of the above actions. After warm booting, it will be possible to reopen a sample using the editing procedure described below, but you will need to reenter any information that was entered after the last save event before the lock up.



On the Intermec CN2B, you can perform a warm boot by holding the power On/Off key down for 10 full seconds. When the screen blanks, release the button and it will reboot.

In the event of a major lockup, the device may need to be cold booted. **This should only be done when all else has failed**, because cold booting will result in loss of any data entered since the last time the NEW button was pressed, or a manual Save Data was performed from the menu. You will also need to go through a data recovery process to restore saved data from backup. Please note that a cold boot will also occur if you allow the battery to be completely depleted.

## **EDITING PREVIOUS SAMPLES**

To change entries or add information not available at the time of head sampling, you can select and edit any previous sample saved on the unit since the last database synchronization. With ZanderCWT open and running, tap the **SAMPLE** tab. Tap **Database** on the menu, and select **Load Sample**. A warning box will open to remind you that any unsaved sample data in the currently displayed sample will be lost if you load a previous sample to edit. If you have an actual sample session underway and do need to save data, tap Cancel, and tap a SAVE button before proceeding. If this is a new sample with no data yet collected, or you know you have already saved all new data, tap OK to continue. This will abandon the currently displayed data and display a list of stored samples.

The list of all stored samples presents them in the order they were collected. Each sample is identified with a temporary Sample ID number and the ADFG number of the vessel sampled. This “temporary” sample number consists of a 3-character port name, a 2-digit unit ID number identifying this particular handheld, and a 3-digit sequence number indicating the chronological order of the samples. **Tap once on the appropriate sample you need to edit, and wait patiently for it to load!**

Note: The last sample entered cannot be opened for editing immediately after it has been saved. This problem may be overcome by reloading a different sample, then loading the desired sample. If the sample that needs editing is the first sample entered for the current sampling session and you are only on your second sample, you will not be able to retrieve the first sample until you begin your third sample. Therefore, it would be advisable to record the sampling information that needs to be corrected onto a paper sampling form until you can reload the sample and correct it electronically later.

Edit fields as needed, and tap **SAVE**.

**CAUTION:** Editing of prior samples is a powerful tool intended to aid completing needed sample data at a later time, or to make needed corrections. However, this powerful tool also makes it easy to introduce errors if used carelessly. When loading previously completed samples, treat these live data with due respect:

- Be cautious of stray pen motions that could change field entries unintentionally.
- Know what is being asked when prompted to abandon unsaved data.
- Wait for samples to load properly before using the stylus.
- Do not forget to **SAVE** intended changes or additions.

## **Head Recovery**

Some processors allow department samplers to remove the heads from adipose clipped salmon, others will not. If processors in your area do not allow you to remove the heads from adipose clipped fish, attach both a cinch strap and flagging to the tagged fish for the processors. In order to reduce the number of heads inadvertently lost by the processor, periodically remind processors to look for these tagged fish. Ask them to set the heads aside in an egg basket, bucket, or cooler.

1. Heads should be periodically collected and:
  - Put each head in an individual plastic bag. Tie the top of the bag in a knot or securely wrap entire bag around the head.
  - Record FLESH color of Chinook salmon if not done previously.
  - Place cinches of any adipose clipped fish observed, but not recovered during the random sampling process, into a separate bag. Record these numbers in the sampling program, and make a note in REMARKS.
  - Heads should be put aside, out of the processors way and in a place (in a freezer if possible) prearranged with the processor.
2. When done sampling, review electronic sampling sessions (and any paper forms) and check that all data items have been completed
3. Return handheld data terminals to your supervisor or the designated data coordinator for your sampling site, or wirelessly synchronize the handheld with the database in the office, as directed by your supervisor.
4. If a processor will not relinquish a tagged head to you because the fish is being sold to the "whole fish market", complete a sampling session anyway. Assign HEAD NUMBERS to all adipose clipped fish and indicate in the REMARKS field that this head (or all heads) could not be recovered because the fish were "sold to a whole fish market." Place these loose cinches in a separate plastic bag, knot it, and send it with other heads shipped to the Tag Lab. If the problem is extensive, obtain phantom numbers to use from the Tag Lab.

If the processor will not give you the whole head but will give you part of the head, collect the front part of the head (make a cut from 3/4 inch behind the eyes to the hinge of the jaw). Advise your supervisor or Detlef Buettner about this problem. Even if all heads are unrecoverable, a sampling session must be completed and HEAD NUMBERS assigned and recorded for all adipose clipped fish observed in the sample.

## Head Pickup and Shipment

1. Handheld data terminals are downloaded by the port supervisor, their designee, or the sampler at the end of each day, or as directed by the supervisor. Downloading automatically transmits all data electronically to the Tag Lab database, with additional checks for errors. The port supervisor or designated data coordinator will edit data to correct any identified errors, and will contact you when clarification is needed.
2. Heads from all samplers at a survey site will be boxed and shipped weekly to the Tag Lab in Juneau on Sunday or Monday, following the close of each statistical week. If a shipment will be delayed, call (907) 465-3483 and inform Detlef Buettner of the problem. **Heads from priority fisheries should be shipped ASAP. Clearly identify their priority status.**

In preparation for boxing, bar coded head tags are scanned to create a sorted inventory listing of heads actually collected. Include a HEAD SHIPMENT SUMMARY FORM with each head shipment. A list of heads shipped can also be created by entering cinch strap numbers into the handheld using the 18 key numeric keypad as the heads are bagged for shipment

### To enter heads on handheld as they are boxed:

Double click on Microsoft Word Pad

- A blank document will appear. Start listing heads as they are boxed by entering cinch numbers using the keypad on the handheld or by scanning the cinch numbers that have barcodes. Press enter after each entry so that a list is formed.
- When you are finished, save the file in *My Documents* and use the following naming convention:  
YYMMDD eg., 070423headsboxed.
- To transfer the lists of heads recovered from the mobile device to your hard drive,
  - a) Place the handheld into the cradle.
  - b) Open Windows Explorer on your computer.
  - c) Open the file Mobile Device and locate the subfolder containing the current list.
  - d) Open the folder. Highlight and copy the list to an excel file. It is suggested that you update the excel file each day heads are boxed so, at weeks end, a complete list of the heads that you will be shipping are listed together. Name the file Port-Statweek-dateshipped (PSG-17-070423).
  - e) At the end of the week when the final heads have been boxed and are ready to ship, sort the excel file in Ascending order. Email the file to Detlef Buettner, along with the AWB number and any comments you have regarding the current shipment.

3. Place heads in large garbage bags before packing them in boxes for shipment. Heads need not be shipped in waxed or "wet lock" boxes if they are individually wrapped in plastic head bags and placed into garbage bags inside boxes. Unless directed otherwise include all species heads in the same box.
4. Note anything out of the ordinary on the box, such as otolith samples enclosed for the Thermal Mark Lab, any hard copy paperwork enclosed, and note if cinches from heads that were not recovered are enclosed.

5. Use the 'CWT Head Shipment' labels to number the boxes so we can be sure the air carrier gives us the complete shipment. If you number them 1 of 5, 2 of 5, etc. we can be sure the airlines gives us your complete shipment. It is also helpful to call or email the lab with the AWB number, number of boxes and estimated time of arrival into Juneau if you have access to a phone or computer. If a shipment is going to be delayed, call (907) 465-3483 and inform Detlef Buettner of the problem.
6. Attach KEEP FROZEN/ADDRESS labels to one or two sides of your boxes.
7. Survey Sites serviced directly by Alaska Airlines should send their heads and data to us on that carrier. Survey Sites in northern Southeast Alaska (Hoonah, Excursion Inlet, Pelican, etc.) should send their heads to the Tag Lab on the first regularly scheduled commuter flight to Juneau on Monday morning. Remember that most of the commuter airlines do not have freezers in Juneau. Do not send heads on commuter flights scheduled to arrive in Juneau after 4:30 PM on weekdays or on weekends.

Ship heads 'freight collect' to:

Alaska Department of Fish and Game  
CF Division, Mark, Tag and Age Lab  
P.O. Box 115526  
Juneau, Alaska 99811-5526

CALL UPON ARRIVAL IN JUNEAU  
(907) 465-3483

Please use the shipping labels provided for your convenience.

Remember to call if you have questions or if you need additional supplies.

Thanks for your hard work and cooperation. Have a good season.



**HARVEST CODE DEFINITIONS  
FOR 2014 CODED WIRE TAG SAMPLING**

- 11 - Traditional Fisheries:** Commercial harvest in traditional and customary common property fisheries managed by the State.
- 12 - Terminal Area:** Commercial harvest taken in a defined hatchery Terminal Harvest area by common property fisheries under State management.
- 13 - Spring Troll Fishery:** Commercial harvest in designated experimental fishing areas by common property fisheries under State management.
- 14 - Experimental Gear:** Commercial harvest by common property fisheries using experimental gear as specified under State management provisions.
- 17 - M-I-C:** Commercial harvest by residents of the Metlakatla Indian Community fishing in federally established reserve waters adjacent to Annette Island.
- 18 - Confiscated:** Fish harvested illegally using commercial gear and confiscated by State or federal fish and wildlife enforcement agencies.
- 21 - PNP Fish:** Hatchery managed cost recovery harvest of salmon with sale proceeds going to private hatchery operators.
- 22 - PNP Carcasses:** Sale of hatchery broodstock carcasses with proceeds going to private hatchery operators.
- 41 - Test Run Assessment:** Harvest by commercial gear in test fisheries conducted by the State for purposes of run strength assessment.
- 42 - Test Special Study:** Harvest by commercial gear in test fisheries conducted by the State for studies other than run strength assessment.

**FIGURE 3**

**SALMON MEASUREMENTS**

